



(12) PATENT ABSTRACT

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(54) CUTTER BRACKET

(75) SIDNEY, K.J.

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(74) GH

(57) Claim

1. A bracket for supporting portion of a length of roofing gutter on a building, the gutter being of channel cross-section and provided with an inner edge for location adjacent the building and an outer edge, the two edges together forming the mouth of the channel;

the bracket comprising a first portion arranged for fixing to the building and a second portion engaged with the first portion, the second portion being arranged for location in the gutter and provided with a free end for load supporting engagement with the outer edge of the gutter, and a bearing portion, the bracket being configured so that when fixed to the building and engaged with the outer edge of the gutter it supports the outer edge and its bearing portion is pressed into engaging contact with the inner wall of the gutter adjacent the gutter inner edge.

PATENTS ACT 1952-69

COMPLETE SPECIFICATION

(ORIGINAL)

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TO BE COMPLETED BY APPLICANT

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Complete Specification for the invention entitled:

The following statement is a full description of this invention, with the best method of performing it known to me/~~us~~-

This invention relates to a bracket for and a method of mounting roofing gutter.

5 Presently used techniques for mounting roofing gutter to a building involve the fixing of a series of brackets to the building and locating the gutter in the brackets.

10 These brackets usually do not provide a very strong support for the roof gutter, with the result that the gutter may deflect when, for example, a ladder is placed against it. Also, to ensure the gutter is installed at the correct slope to enable the required water run-off, a string line and level should be used when fixing the brackets to the building. This procedure is time consuming and therefore expensive, and is often found tedious.

15 The present invention is directed to overcoming some of the defects of the prior art.

20 According to one aspect of the invention there is provided a bracket for supporting portion of a length of roofing gutter on a building, the gutter being of channel cross-section and provided with an inner edge for location adjacent the building and an outer edge, the two edges together forming the mouth of the channel;

25 the bracket comprising a first portion arranged for fixing to the building and a second portion engaged with the first portion, the second portion being arranged for location in the gutter and provided with a free end for load supporting engagement with the outer edge of the gutter, and a bearing portion, the bracket being configured so that when fixed to the building and engaged with the outer edge of the gutter

it supports the outer edge and its bearing portion is pressed into engaging contact with the inner wall of the gutter adjacent the gutter inner edge.

5 In a preferred form of the invention, the bearing portion of the bracket is shaped to the contour of the inner wall of the gutter and is provided with latching means for engagement with the inside of the gutter adjacent the inner edge, the latching means being effective to support the inside of the gutter.

10 The first portion of the bracket may comprise a simple tab arranged, for example, to be nailed to the building, though most preferably the first portion is hook-shaped and arranged to be "hooked" over a barge board or the like, leaving the bracket ready, after securing e.g. with a nail,
15 to receive the gutter.

Preferably, the latching means may comprise a slot provided in the bearing portion of the bracket. In order for the gutter to engage this slot, the gutter may be provided with a ridge on the inner wall of the gutter
20 adjacent the inner edge and which is adapted to engage the slot.

Preferably the slot in the bearing face is provided at an angle to the surface of the bearing face, and the ridge is also made at substantially the same angle to the surface
25 of the gutter, so that when the gutter is installed on the bracket, the inner edge of the gutter is supported by the ridge engaging with the angled slot.

Preferably, a plurality of brackets is used to mount a

length of gutter and each is provided with a different offset on the hook referred to above so that each bracket is arranged to support a portion of gutter at a different relative height. Thus, if the brackets are located on the building, e.g. in order of reducing gutter support height, and the gutter is installed thereon, the gutter will be supported with a desired slope.

Preferably each of the brackets is marked with an indication as to the height at which it will support the gutter relative to the height at which the other brackets will support the gutter. The bracket may be made of any suitable plastics material or metal.

According to another aspect of the invention there is provided a bracket for supporting a portion of roofing gutter on a building, the bracket being of the type referred to above, and a gutter arranged to co-operate with the bracket, the gutter being of channel cross-section and provided with an inner edge for location adjacent the building and an outer edge, the two edges together forming the mouth of the channel;

the gutter being arranged to be supported by the bracket, the outer edge of the gutter being arranged for load supporting engagement by the free end of the second portion of the bracket, and the inner wall of the gutter adjacent the inner edge of the gutter being provided with a ridge adapted to engage in a slot in the bearing portion of the bracket enabling the support of the inner edge by the bracket.

According to another aspect of the invention there is provided a method of mounting a length of roofing gutter on a building, the method comprising fixing a plurality of brackets of the type referred to above to a barge board or the like provided on the building and locating a length of the gutter on the brackets.

Preferably, the gutter used in the method referred to above is provided with a ridge on the inner wall adjacent the inner edge as discussed above. The gutter may be made of any suitable plastics material or metal.

Preferably, the location of the gutter on the brackets involves the steps of securing the inner edge of the gutter to the bearing portion of the brackets using the latching means, and engaging the outer edge of the gutter with the free ends of the brackets.

Brackets of the same proportions may be used to support the whole length of gutter, but, preferably a plurality of slightly different brackets may be used where each bracket is arranged to support a portion of gutter at a relatively different height from the height at which the other brackets support the gutter. The use of different brackets involves the steps of selecting a plurality of brackets which provide a range of gutter support heights, locating the brackets on the building at a desired spacing with the support heights running from highest to lowest, and mounting the gutter on the brackets. The use of this preferred method thus allows the mounting of a gutter at a desired slope.

The advantages of the present invention are:

- (1) Less brackets per unit length of mounted gutter are required,
- (2) The brackets are easily fitted and their use therefore offers time savings for mounting the gutter, and
- 5 (3) Because fewer brackets are needed, an overall saving in the amount of bracket material required per unit length of gutter mounted may be achieved.

A preferred embodiment of the invention will now be described with reference to the accompanying drawings wherein:

10 Figure 1 is a perspective view of a bracket embodying the invention used in conjunction with a suitable gutter portion; and

Figure 2 is a sectional view of the bracket/gutter assemblage of Figure 1.

15 Figure 1 shows a barge board 10 to which is connected a gutter bracket generally indicated as 11 supporting a length of roofing gutter 12.

The bracket is provided with hook 13 to secure it to the barge board. The bracket also is provided with cut-
20 out portion 14 to accommodate the ridge 15 which is provided in the side of gutter 12.

To mount a section of gutter using such a bracket, first the bracket is located on the barge board, then the inner edge 16 of the gutter is pushed up between the bracket and the barge board, with the ridge 15 engaging with the cut-
25 out portion 14. The outer edge 17 of the gutter is then deformed into engagement with the free end 18 of the bracket.

The functional effect achieved by the bracket of

the invention is described as follows. Once the gutter is mounted on the bracket as depicted in Figure 2 the gutter, by its weight, exerts a downward force on both free end 18 and cut-out portion 14 of the bracket. The downward force on free end 18 applies a torque to the barge board 10 through bracket 11. However, the configuration of the bracket and its connection to the barge board provide an effective resistance to the torque. Similarly, the downward force exerted by the inner portion of the gutter acting through cut-out portion 14 is resisted by the bracket through its connection to the barge board via hook 13.

To make brackets capable of supporting gutterings at different relative heights, portion 19 of hook 13 may be made of a different length in a series of brackets, each different length of the portion corresponding to a different gutter support height.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A bracket for supporting portion of a length of roofing gutter on a building, the gutter being of channel cross-section and provided with an inner edge for location adjacent the building and an outer edge, the two edges together forming the mouth of the channel;

the bracket comprising a first portion arranged for fixing to the building and a second portion engaged with the first portion, the second portion being arranged for location in the gutter and provided with a free end for load supporting engagement with the outer edge of the gutter, and a bearing portion, the bracket being configured so that when fixed to the building and engaged with the outer edge of the gutter it supports the outer edge and its bearing portion is pressed into engaging contact with the inner wall of the gutter adjacent the gutter inner edge.

2. A bracket for supporting portion of a length of roofing gutter as claimed in claim 1 wherein latching means are provided on the bearing portion of the bracket engageable with the inner wall of the gutter.

3. A bracket as claimed in claim 2 in which the latching means comprises a slot provided in the bearing surface of the bracket, the slot being engageable with a ridge provided on the inner wall of the gutter to effect support of the inner wall of the gutter on the bracket.

4. A bracket as claimed in claim 3 in which the slot is provided at an angle to the surface of the bearing face of the bracket and the ridge is also disposed substantially at

the same angle to the surface of the gutter so that when the gutter is installed on the bracket the inner edge of the gutter is firmly supported by the ridge engaging with the angled slot.

5. A bracket for supporting a portion of roofing gutter on a building, the bracket being of the type referred to in Claim 1, and a gutter arranged to co-operate with the bracket, the gutter being of channel cross-section and provided with an inner edge for location adjacent the building and an outer edge, the two edges together forming the mouth of the channel.

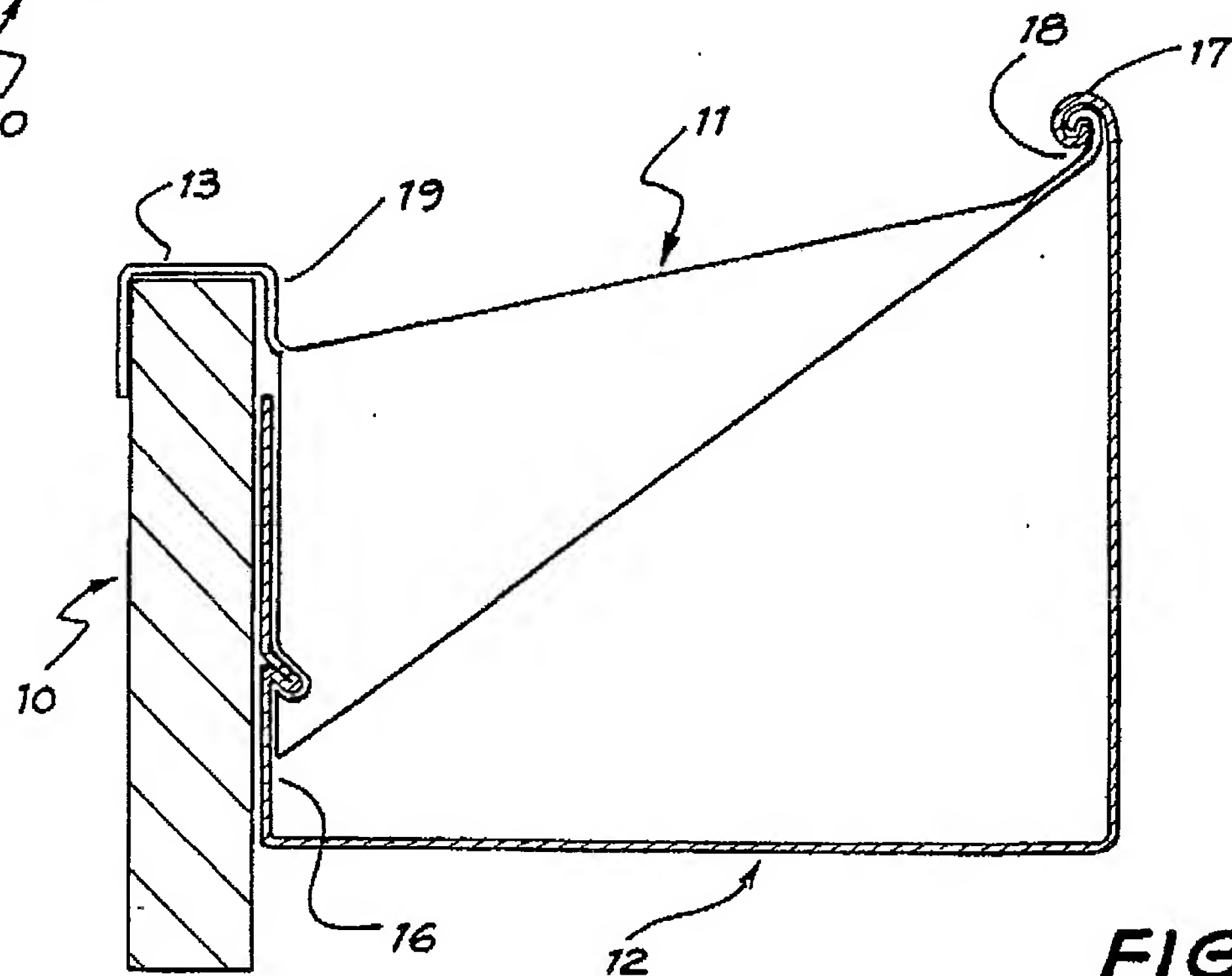
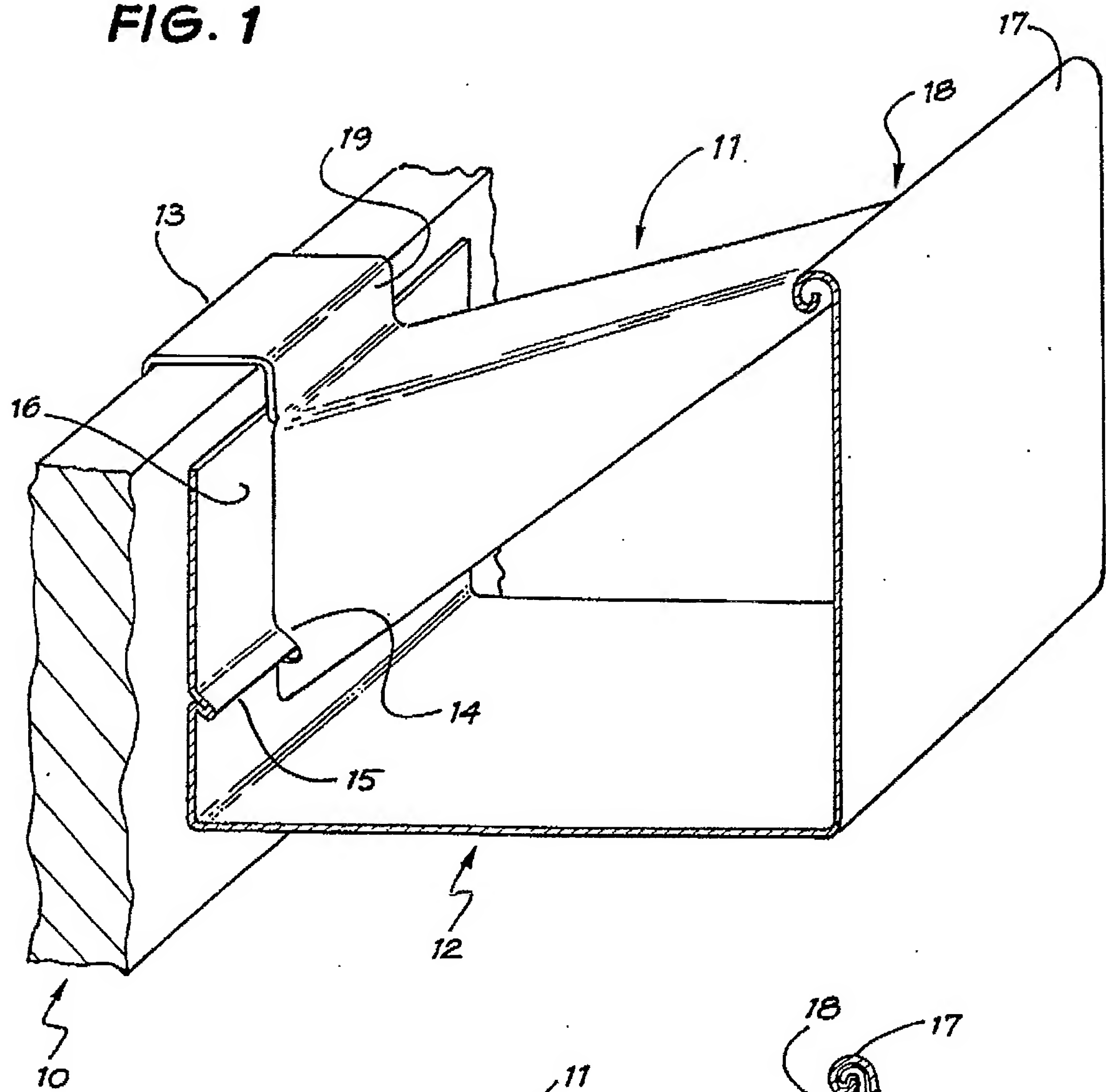
6. A method of mounting a length of roofing gutter of channel cross-section on a building, the method comprising fixing a plurality of brackets of the type referred to in Claim 1 above to a barge board or the like provided on the building and locating a length of the gutter on the brackets.

7. A method of mounting a length of roofing gutter as claimed in claim 6 in which each of the brackets used is arranged to support a length of roofing gutter at a slightly different relative height, the method comprising fixing the brackets to the barge board at approximately equally spaced distances and in order of constantly reducing relative gutter support height.

8. A bracket for supporting portion of a length of roofing gutter substantially as depicted in the accompanying drawings and substantially as hereinbefore described with reference thereto.

DATED this 17th day of December, 1980.

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by his Patent Attorneys
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FIG. 1**FIG. 2**